

ABSTRACT

A fuel injector, in particular for the direct injection of fuel into a combustion chamber of an internal combustion engine, having a valve-closure member which cooperates with a valve-seat surface formed on a valve-seat body, to form a sealing seat, includes at least one spray-discharge orifice provided downstream from the sealing seat. The spray-discharge orifice has a guide region and an exit region arranged at its discharge-side end. The exit region widens in a stepped manner by at least one first step and/or at least in part continuously beginning with a transition from the guide region into the exit region. A fuel jet which emerges from the guide region at the transition and widens essentially uniformly at a jet angle, passes a discharge-side end of the exit region with a gap dimension of a gap after a distance s , the gap dimension being greater than zero and a first volume remaining in the exit region between the fuel jet and the inner walls of the exit region.